University of Washington Engineered Biomaterials
An NSF Engineering Research Center
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December 4, 2006

Kevin J. Martin
Chairman
Federal Communications Commission
445 12th Street, SW
Washington, D.C. 20554

Re: Reply Comments
ET Docket No. 06-135 & RM-11271

Dear Chairman Martin:

I, and my research program, University of Washington Engineered Biomaterials (UWEB), support the Alfred Mann Foundation's ("AMF") request that the Commission adopt service rules and allocate up to 20 MHz of spectrum to accommodate new wireless wideband microstimulator devices on a secondary basis. Our Federally funded University of Washington program develops biomaterials that used to fabricate medical devices. The possibilities to use wireless wideband communication with many implanted medical devices opens frontiers for implants and thus this proposal is important to us (and to the whole biomaterials field).

The establishment of a service allocation is vital to the development of a new generation of wireless wideband medical devices designed to restore sensation and function to paralyzed limbs and organs. These devices offer a safer, less invasive, and more effective treatment option than is available with existing equipment.

The Commission's rules currently do not provide a spectrum to permit operation of new wireless wideband microstimulator devices. Although the Commission has allocated some spectrum for medical telemetry operations and for medical implant communications services, this spectrum is not suitable for wideband medical implant devices that require larger bandwidths to perform more complex functions. Without adequate spectrum and service rules to support the operation of these innovative devices, millions of Americans will be deprived of a safe and effective medical treatment for their debilitating health conditions.

The Commission's notice of inquiry issued in the above-referenced proceeding is an important first step toward adopting the necessary rules to encourage deployment of the next generation of wireless wideband microstimulator devices. I, and other researchers in the UWEB program, urge the Commission to continue its efforts in this area by expeditiously granting AMF's request for commencement of a separate rulemaking.

Sincerely,

/s/ Buddy D. Ratner, Ph.D.

Buddy D. Ratner, Ph.D.
Director, UWEB
Michael L. and Myrna Darland Endowed Chair in Technology Commercialization
Professor of Bioengineering and Chemical Engineering

cc: Marlene H. Dortch
FCC Secretary